

REF: 8WM-DW

Mr. Jack B. McWilliams
Century Oil and Gas Corporation
7887 East Bellview Avenue, Suite 800
Englewood, Colorado 80111

RE: UIC Permit Application
Vickers #1 SWDW (MTS21PR-0002)

Dear Mr. McWilliams:

Thank you for your response to our letter of September 25. We are pleased to inform you that the UIC permit application for the salt water disposal well referenced above is now complete. We are currently in the process of ~~writing a draft permit for this well. Once the draft permit has been prepared, EPA will issue public notice requesting public comment on the draft permit.~~

Laura Clemmens is the permit writer assigned to your permit. Inquiries should be addressed to Ms. Clemmens at the above address or at (303) 844-2731.

Sincerely yours,

Max H. Dodson, Director
Water Management Division

CLEMMENS/craig/10/29/84/8862P/page 2/draft
correction/1st final print 10/30/84/craig

*performing our final review of your application.
If appropriate, a draft permit will be prepared.
At that time,*

*SWM-DW
Clemmens
10/30/84*

CLEMMENS/craig/9/13/84/7899P/page 1/draft
corrections/1st final print 9/19/84/craig
corrections/2nd final print 9/19/84/clemmens
SEP 25 1984

REF: 8WM-DW

Jack B. McWilliams
Century Oil and Gas Corporation
7887 East Bellevue Drive
Englewood, Colorado 80110

RE: Underground Injection Control (UIC)
Permit Application for
Vickers #1 SWDW (Permit No. MTS21PR-0002)

Dear Mr. McWilliams:

Thank you for your prompt response to our letter of August 21. Please note that this letter deals solely with the Vickers #1 SWDW. The Goings #1 and the Clark #1 will be addressed separately by Jim Boyter. There are two deficiencies with regard to the Vickers #1 that were overlooked in your letter of August 29. These must be addressed before we can declare your application complete. They are as follows:

- 1) AREA OF NOTIFICATION: As mentioned in our letter of August 21, we need to have evidence that you have given separate notice of your intent to apply for a permit to each owner or tenant of the land within 1/4 mile of the Vickers SWDW #1. Please send us a copy of the notice, as well as a list of those people to whom you sent notice. Bill Moomey, in his phone call and subsequent letter of August 27, advised us that he would take care of the notification requirements and would advise us accordingly. Please contact us if there are any changes to this arrangement.
- 2) GEOLOGICAL DATA ON INJECTION AND CONFINING ZONES: As we requested in our letter of August 21, you must submit the fracture gradient of the injection formation (Dakota) to this office. If this information is not readily available to you, please advise us.

We will be unable to declare your application complete until the two items mentioned above have been addressed. Please submit the necessary information to us as soon as possible but no later than October 10. If you have any questions with regard to the Vickers #1 permit, or if we can be of help to you in any way, please contact Laura Clemmens at the Denver office at (303) 844-2731.

Sincerely yours,

Max H. Dodson, Director
Waste Management Division

cc: Bill Moomey, Land Manager

REF: 8WM-DW

Jack B. McWilliams
Century Oil and Gas Corporation
7887 East Belleview Drive
Englewood, Colorado 80110

RE: Underground Injection Control (UIC)
Permit Application for
Vickers #1 SWDW (Permit No. MTS21PR-0002)

Dear Mr. McWilliams:

Thank you for your prompt response to our letter of August 21. Please note that this letter deals solely with the Vickers #1 SWDW. The Goings #1 and the Clark #1 will be addressed separately by Jim Boyter. There are two deficiencies with regard to the Vickers #1 that were overlooked in your letter of August 29. These must be addressed before we can declare your application complete. They are as follows:

- 1) AREA OF NOTIFICATION: As mentioned in our letter of August 21, we need to have evidence that you have given separate notice of your intent to apply for a permit to each owner or tenant of the land within 1/4 mile of the Vickers SWDW #1. Please send us a copy of the notice, as well as a list of those people to whom you sent notice. Bill Moomey, in his phone call and subsequent letter of August 27, advised us that he would take care of the notification requirements and would advise us accordingly. Please contact us if there are any changes to this arrangement.
- 2) GEOLOGICAL DATA ON INJECTION AND CONFINING ZONES: As we requested in our letter of August 21, you must submit the fracture gradient of the injection formation (Dakota) to this office. If this information is not readily available to you, please advise us.

We will be unable to declare your application complete until the two items mentioned above have been addressed. Please submit the necessary information to us as soon as possible but no later than October 10. If you have any questions with regard to the Vickers #1 permit, or if we can be of help to you in any way, please contact Laura Clemmens at the Denver office at (303) 844-2731.

Sincerely yours,

ORIGINAL SIGNED BY
MAX H. DODSON

Max H. Dodson, Director
Water Management Division

CLEMMENS/craig/9/13/84/7899P/page 1/draft
corrected for let final print 9/10/84/craig

SWM-DW
Clemmens
9/19/84

SWM-DW
Lor
9/19/84

SWM-DW
Crotty
9-20/84

SWM-DW
PREWITT
9/20/84

#1125
B.A.

AUG 21 1984

Ref: 8WM-DW

Jack B. McWilliams
Century Oil and Gas Corporation
7887 East Bellevue Avenue
Englewood, Colorado 80111

Re: Underground Injection Control (UIC)
Permit Applications for:
Vickers #1 SWDW (Per. No. MTS21PR-0002)
Goings #1 SWDW (Per. No. MTS21PR-0003)
Clark #1 SWDW (Per. No. MTS21PR-0004)

Dear Mr. McWilliams:

On July 30, 1984, we received your applications for UIC permits to allow the injection of produced brine into the above-referenced wells in the Northwest Poplar field, Montana. We have determined that there are a number of deficiencies and/or parts missing from the applications, and will not be able to declare the applications complete and begin processing your application until they have been received. Certain deficiencies are common to all three of the applications and they are listed below. Deficiencies specific to each well follow the general listing under the well name. The problems that must be addressed on each of the three permit applications are as follows:

1. **SIGNATORY:** The person who signs the permit application must be either: 1) A principal executive officer of at least the level of a Vice-President or; 2) A duly authorized representative so identified in writing by a Vice-President or higher. See 40 CFR Section 144.32 (a) and (b).

2. **DESCRIPTION OF INJECTION OPERATION:** In the interest of expediency and clarity, please submit a brief (one or two paragraph) description of each injection operation (e.g., Well # A is injecting into the X formation and the injection fluid will be composed of produced water from well #'s B and C, producing from the Y formation). See 40 CFR Section 144.31(e)(1).

3. **AREA OF NOTIFICATION:** You are required to give separate notice of intent to apply for a permit to each owner or tenant of the land within a quarter-mile of the subject well. See 40 CFR Section 147.1355(b). When you have given notice, please submit a list of the names and addresses of the owners of record to whom you have sent notice to this office.

8WM-DW
R.R. Long
8/8/84

8WM-DW
Cathy
8/8/84

8WM-DW
Emmette
8/10/84

BRC
Hobson
8/16/84

AS

X-127
18

AUG 2 1 1984

Ref: 81-01

Jack B. Williams
Century Oil and Gas
7887 East Delaney
Englewood, Colorado

P 546 001 821

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL

(See Reverse) 643

* U.S.G.P.O. 1983-403-517
PS Form 3800, Feb. 1982

Sent to	Jack B. Mc Williams
Street and No.	Century Oil and Gas
P.O., State and Zip Code	7887 E. Belleview Ave. Englewood, Colorado 80111
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to whom and Date Delivered	
Return receipt showing to whom, Date, and Address of Delivery	
TOTAL Postage and Fees	\$
Postmark or Date	

Dear Mr. Williams:
On July 30, 1984, the infection of
your system was detected.
The infection was caused by
a virus which was attached to
an application which was
specific to each
problem and was
as follows:

IN SILENT
Status: 1
Type: Preset
Writing by
(b)

DESCRIPTION OF INFECTION
First, please submit a brief (one or two paragraphs) description of each
infection operation (e.g., Well A is infected into the Y formation
and the infection fluid will be composed of produced water from Well A's
3 and 4 production from the Y formation). See 40 CFR Section
101.11 (1)(1).

AREA OF NOTIFICATION: You are notified to give separate notice of
infect to each owner or owner of the land within a
quarter mile of the subject well. See 40 CFR Section 101.115(d). When
you have given notice, please submit a list of the names and addresses of
the owners or owners to whom you have submitted to this office.

8/8/84
8/8/84
8/8/84

Ref: 8WM-DW

Jack B. McWilliams
Century Oil and Gas Corporation
7887 East Belleview Avenue
Englewood, Colorado 80111

Re: Underground Injection Control (UIC)
Permit Applications for:
Vickers #1 SWDW (Per. No. MTS21PR-0002)
Goings #1 SWDW (Per. No. MTS21PR-0003)
Clark #1 SWDW (Per. No. MTS21PR-0004)

Dear Mr. McWilliams:

On July 30, 1984, we received your applications for UIC permits to allow the injection of produced brine into the above-referenced wells in the Northwest Poplar field, Montana. We have determined that there are a number of deficiencies and/or parts missing from the applications, and will not be able to declare the applications complete and begin processing your applications until they have been received. Certain deficiencies are common to all three of the applications and they are listed below. Deficiencies specific to each well follow the general listing under the well name. The problems that must be addressed on each of the three permit applications are as follows:

1. SIGNATORY: The person who signs the permit applications must be either: 1) A principal executive officer of at least the level of a Vice-President or; 2) A duly authorized representative so identified in writing by a Vice-President or higher. See 40 CFR Section 144.32 (a) and (b).

2. DESCRIPTION OF INJECTION OPERATION: In the interest of expediency and clarity, please submit a brief (one or two paragraph) description of each injection operation (e.g., Well # A is injecting into the X formation and the injection fluid will be composed of produced water from well #'s B and C, producing from the Y formation). See 40 CFR Section 144.31(e)(1).

3. AREA OF NOTIFICATION: You are required to give separate notice of intent to apply for a permit to each owner or tenant of the land within a quarter-mile of the subject well. See 40 CFR Section 147.1355(b). When you have given notice, please submit a list of the names and addresses of the owners of record to whom you have sent notice to this office.

4. INDIAN LANDS: All three wells are located at 29N, 50E (Sections 6, 20 and 27). It appears from our maps that all three are located on the Fort Peck Indian Reservation, yet you indicate that only the Goings #1 is on Indian Lands. Please clarify. Permit applicants for injection wells on or within one-half mile of Indian Lands must extend the area of notification to one-half mile of the subject well. See 40 CFR Section 147.1355(c).

5. NAME AND DEPTH OF USDW's: Attachment E (Name and Depth of USDW) requires a submittal of data on USDW's which may be affected by the injection operation. It is EPA policy to expect that any Underground Source of Drinking Water (USDW) overlying an injection zone has the potential for becoming contaminated by that injection. The data submitted as Attachment E is inadequate for our review procedures. There are other USDW's overlying injection zones besides the Judith River (e.g., Fox Hills, Hell Creek, and the Fort Union, all of which meet the definition of a USDW). Please elaborate on your submittals for each permit, giving us the geologic name and depth to the bottom of all USDW's occurring above the injection zones.

6. GEOLOGICAL DATA ON INJECTION AND CONFINING ZONES: With reference to Attachment G (Geologic Data), the geologic data submitted must be expanded upon. Please submit, in narrative form, the appropriate geologic data on the injection zone and confining zones including: lithologic description; geological name; thickness; depth and fracture pressure (and how the fracture pressure was determined). If possible, please submit a local geological map plus a site-specific stratigraphic column.

7. OPERATING DATA: Attachment H (Operating Data) requires that the average and maximum daily injection rate, volume and pressure be established in the permit application. You have stated the average rate, volume and pressure, but not the maximum. Please do so for each well.

WELL-SPECIFIC DEFICIENCIES

In addition to addressing the issues mentioned above for all three wells, please respond to the well-specific issues listed below:

VICKERS #1

1. You have submitted well data for all wells within a one-mile radius of the subject well as Attachment C (Corrective Action). One of the those wells is the Tribal #1. The data submitted is unclear. Who owns/operates the Tribal #1? Is it an active producer at this time? If not, what is its status?

2. In Attachment H (Operating Data), you state that water analyses for the two injection source wells are attached. One of the source wells referenced is the Mason #7-16, but no analysis is included for that well. Please submit this analysis or explain why it was not available.

GOINGS #1

1. Since you have stated that the Goings #1 is located on Indian Lands, please indicate whether or not there is a current Bureau of Land Management permit for this well. If there is such a permit, include the permit number.
2. With regard to your submittal for Attachment A (Area of Review Methods), the top portion of the topographic map in Exhibit I is missing. This missing portion is within the one-mile radius of the subject well. Please submit a new topographic map with the missing portion added. In addition, the maps submitted as Exhibit I and Exhibit II do not agree with each other. Specifically, the plotting of wells 27-1 and 27-3 is different on each map. Please check your plotting and resubmit.

CLARK #1

1. Because the Clark #1 had not commenced injection prior to September 2, 1983 (which is the date of publication for the proposed UIC regulations, and the cut-off date for "grandfathering in" aquifer exemptions for existing wells), you may need an aquifer exemption in addition to a permit. Aquifers with less than 10,000 mg/l total dissolved solids qualify as USDW's and must receive an exemption before EPA can issue a permit to inject (see 40 CFR Sections 144.7 and 146.4). The Goings #1 and the Vickers #1, which commenced injection on 3/22/82 and 4/1/83, respectively, were included on our initial injection well inventory and were granted automatic aquifer exemptions upon UIC program approval. In order to determine whether or not an aquifer exemption is necessary, we will need further information on the injection zone including water quality and water use. A copy of the UIC Fact Sheet on aquifer exemptions is attached. If an aquifer exemption is required for the Clark #1 well, continued use of the well is a violation of the Safe Drinking Water Act which subjects you to a penalty of up to ten-thousand dollars (\$10,000) per day of noncompliance (per 40 C.F.R. Section 144.12).

As soon as we receive all the information listed above, we will be able to proceed with processing the permits and the aquifer exemption. Please submit the required information to the Denver Regional office as soon as possible, but no later than September 6th. If you have any questions regarding this letter, or on the status of your applications, please contact Laura Clemmens (for the Vickers #1 well) at (303)844-2731 or Jim Boyter (for the Goings #1 and Clark #1 wells) at (406)449-5486.

Sincerely,

Original signed
John G. Welles

John G. Welles
Regional Administrator

ROUTING AND TRANSMITTAL SLIP

Date

8-3-84

TO: (Name, office symbol, room number,
building, Agency/Post)

Initials

Date

1. Derrick
2. Re: Century Oil Permits -
3. Determination of Completeness
- 4.
- 5.

Action	File	Note and Return
<input checked="" type="checkbox"/> Approval	For Clearance	Per Conversation
<input checked="" type="checkbox"/> As Requested	For Correction	Prepare Reply
<input type="checkbox"/> Circulate	For Your Information	See Me
<input checked="" type="checkbox"/> Comment	Investigate	Signature
<input type="checkbox"/> Coordination	Justify	

REMARKS

Hi Derrick, I attach the following
for your review:

① Draft of my letter ~~stating~~
to Century Oil, stating deficiencies.

② One of the three permit
applications (Vickers #1). This
is an original, please return it
as soon as possible.

③ Please Comment by Monday Mon.

DO NOT use this form as a RECORD of approvals, concurrences, disposals,
clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)

Room No.—Bldg.

I thank—

Laura Clemmens

Phone No.

2731

Comments:

① Vicker's application:

! What about 144.31 @ (9) ?

② Letter of deficiency:

p. (2) # 5. "Therefore, the data

submitted as Attachment E is inadequate

for ~~to~~ our review procedures." →

are you saying that Fox Hills,

Hill Creek and Fort Union are not

listed as USBLs in the permit application,

but should be - and because of this

"... the data submitted ~~is inadequate~~
... is inadequate?"

The A is hard to follow.

SPECIAL

U.S. ENVIRONMENTAL PROTECTION
AGENCY

EPA FORM 1320-8 (4-73)

Ref: 8WM-DW

Mr. Jack B. Williams
Century Oil and Gas Corporation
7887 East Belleview Avenue
Englewood, Colorado 80111

Re: Permit Applications for:
Vickers #1 SWDW
Goings #1 SWDW
Clark #1 SWDW

*Underground
Injection
Control (UIC)*

Dear Mr. Williams:

On July 30, 1984, we received your application for ^{UIC to} permits ^g allowing the injection of produced brine into the above-referenced wells in the Northwest Poplar field. We have determined that there are a number of deficiencies and/or parts missing from the application, and we will not be able to declare the application complete until they have been received. ^{the} Certain deficiencies are common to all three of the applications and they are listed below. ^{Processing applications cannot begin until they are determined to be complete.} Deficiencies specific to each well follow the general listing under the well name. The problems that must be addressed on each of the three permit applications are as follows:

1. SIGNATORY: The person who signs the permit application must be either: 1) A principal executive officer of at least the level of a Vice-President or; 2) A duly authorized representative so identified in writing by a Vice-President or higher. See 40 CFR (Part 144.32 (a) and ^{ital/} Section

(b) ~~for details.~~

2. DESCRIPTION OF INJECTION OPERATION: In the interest of expediency and clarity, please submit a brief (one or two paragraph) description of each injection operation (e.g., Well # A is injecting into the X formation and the injection fluid will be composed of produced water from well #'s Y and Z, producing from the B formation). See 40 CFR Section 149.31(e)(1).

3. AREA OF NOTIFICATION: You are required to give separate notice of intent to apply for a permit to each owner or tenant of the land within a quarter-mile of the subject well. See 40 CFR ^{Section} ~~Part~~ 147.1355(b) ~~for~~ ^{its} ~~details.~~ ^{section}

4. INDIAN LANDS: All three wells are located at 29N, 50E (Sections 6, 20 and 27). It appears from our maps that all three are located on the Fort Peck Indian Reservation, yet you indicate that only the Goings #1 is on Indian Lands. Please clarify. Owners or operators on or within one-half mile of Indian Lands must extend the area of notification (as mentioned in comment #3) to one-half mile of the subject well. see 40 CFR Section 147.1355(c).